

# TIMEPAC Academy

## Session 5

### Key elements of proper planning and site visit

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# Power of proper planning (1/2)

- For any project (EPC, energy audit or a complex analysis of various technical system) - planning and preparation is a crucial phase
- **Efficient planning** includes at least the following:
  - Set-up the project team and assign specific tasks
  - Kick off the project successfully and initiate data gathering
  - Establish a relationship with the building's management and personnel
  - Establish effective lines of communication and co-ordination between the project team and building's personnel
  - Lay out a time table and scope of all activities

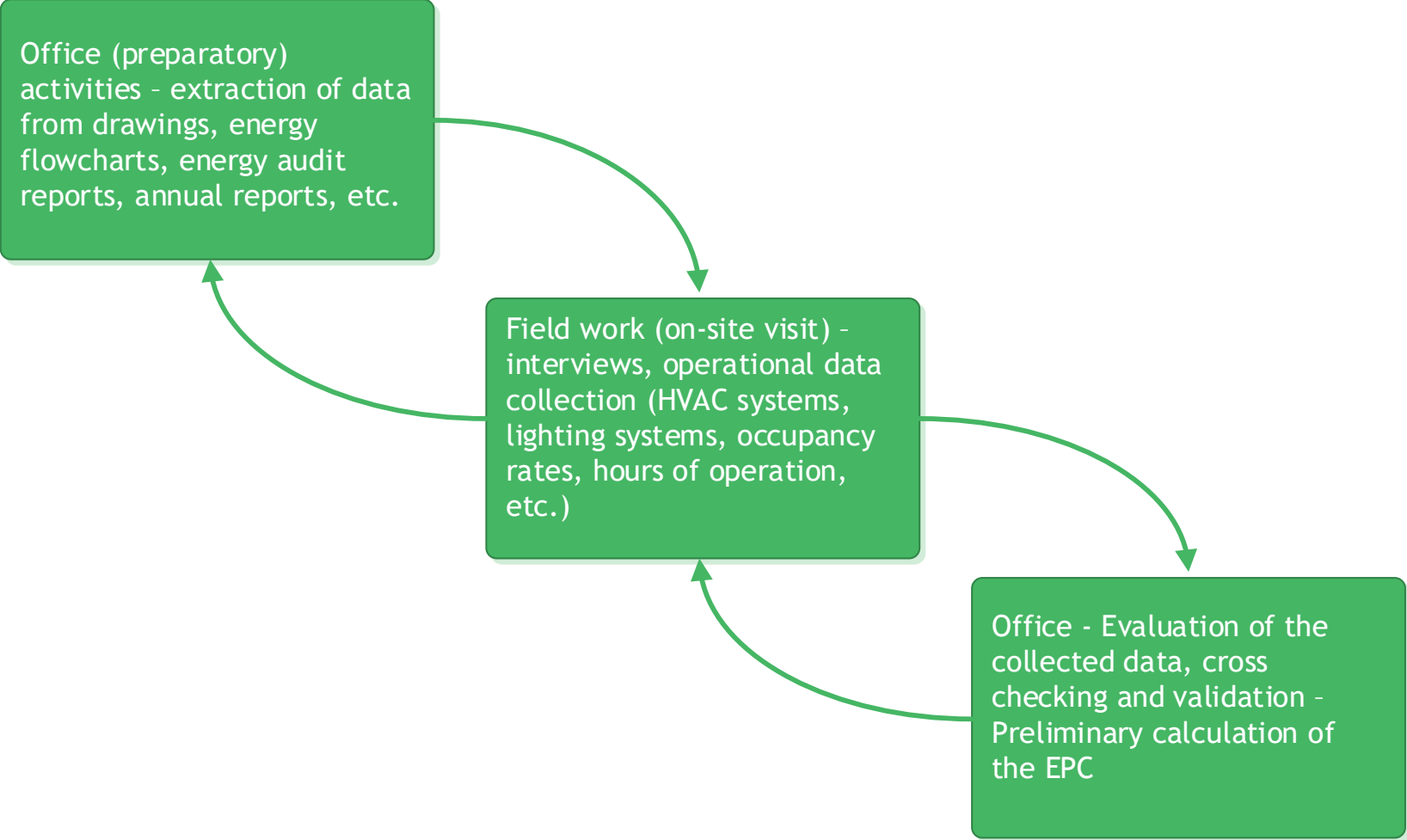
# Power of proper planning (2/2)

- You are responsible for data collection!
- The planning activities should be documented in a form of a work plan, which should be also shared with the building personnel prior to visiting the building to carry out the planned activities
- **All phases, deadlines and responsibilities need to be determined:**
  - Project team meetings, project phases, milestones, organisational integration, modes of working together and information channels
  - Clear definition of tasks and expertise of all the participating parties
  - Target dates, deadlines, person responsible, continuous planning adjustments
  - **React at once to any deviations, without intervention nothing will get better!!**
  - Document changes!

# Enhanced EPC, on-site visit and EPBD

- Why do we need on-site visit?
- We need it to verify pre-collected data, but also to collect additional data
- Directly linked with the EPBD:
  - Member States shall ensure that energy performance certificates are issued in accordance with Article 17(1) and by independent experts based on an on-site visit, which may be carried out, where appropriate, by virtual means with visual checks
  - The renovation passport shall be issued in a digital format suitable for printing by a qualified or certified expert, following an on-site visit
- **Yes, we need on-site visit for creating enhanced EPCs!**

# Overview of the data collection process



**On-site visit is in the heart of the data collection process**

# Principles of the on-site visit

- **Be consistent** with the agreed scope, objectives and degree of depth
- **Simple measurements and observations are beneficial** for the future analysis
- In order to collect reliable and relevant data, **inspect representative processes, equipment and systems**
- **Always try to produce valuable information for the end-user** (building owner, tenant, facility manager, etc.) - always conduct **techno-economical analysis of identified energy saving** (or performance improvement) opportunities
- **Document your assumptions** in order to enable the organization to monitor the progress and energy performance improvement

# Effective time management and meeting skills (1/2)

- Be aware that **the process of energy performance certification** is not only task oriented but also, and even more important - **people oriented!**
- Common **questions owners/energy managers/facility managers** are facing in their quest to improve energy performance of their buildings are:
  - How well do we perform?
  - How do we compare with our neighbours/competitors?
  - What can we do to improve our energy performance?
  - How can we monitor progress and recognize the areas of strong or poor performance?  
**Dynamic EPC, connecting with smart meters, sensors, etc.?**

# Effective time management and meeting skills (2/2)

- Personal appearance is very important:
  - Simplicity is based on short sentences and commonly used words (always explain unfamiliar words)
  - Keep eye contact
  - Variable speaking techniques (volume, tempo, accentuation)
  - Good use of pauses
  - Relaxed and confident appearance
- Personal integrity and open answering on questions:
  - Answer simple questions immediately
  - Defer complex questions, don't get involved in lengthy discussions
  - Clarify questions not expressed clearly (allow questions to be more fully explained, ask questions in return)
  - Stay within your area of competence. Openly admit if you don't know the answer



# Project circle – energy performance certification as the first step towards deep energy renovation of building

- Don't forget that the energy performance certification is the first step in the improvement of energy performance - your entry point and unique opportunity
- Communicate with local staff during on-site visits. Often they already know what are the weak points of the building or analysed technical systems (problems have been known about for a long time - constant complaints from users regarding certain issues)
- Many project concepts failed because the auditing/certification team was not able to translate basically very good facts into language that the decision-makers understand
- Each team member has to be assigned to a right role based on his or her skills

# Conclusion and implementation approach

- Creating enhanced EPC is not simple, but it is necessary for reaching EU energy and climate goals
- Excellent understanding of the end-users' needs - if you provide concrete benefits in terms of tailored energy-saving measures to the end-users, they will be ready to pay more for the enhanced EPC

Potential reduction in electricity consumption (MWh/year)	82,3
Indirect (electricity induced) CO <sub>2</sub> emission reduction (t CO <sub>2</sub> / year)	42,2
Cost reduction (€ / year)	6.200
Payback period (static) (year)	2,2
Net present value (€) (economic lifetime 5 years and discount rate 10%)	10.000
Internal Rate of Return (%)	36

**If you would like more information,  
please visit [www.timepac.eu](http://www.timepac.eu) or contact us at  
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Thanks for your attention!